

# NEW DESCRIPTIONS

## A NEW SPECIES OF *MACROCENTRUS* CURTIS (HYMENOPTERA: BRACONIDAE) FROM INDIA<sup>1</sup>

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(With three text-figures)

*Macrocentrus nixoni* sp. nov. is described and illustrated. A key to the Indian species of *Macrocentrus* Curtis is provided.

### INTRODUCTION

*Macrocentrus* Curtis is a small genus erected with a type species, *Macrocentrus bicolor* Curtis. Muesebeck (1932) and Eady and Clark (1964) revised the genus. Shenefelt (1969) contributed on the taxonomy of *Macrocentrus*.

In India, only three species of *Macrocentrus* Curtis are known so far, viz., *M. crassinervis* Nixon (1950), *M. persephone* Nixon (1950) and *M. trimaculatus* (Cameron) Nixon (1939).

In the present work *Macrocentrus nixoni* sp. nov. is described from the material collected in India: Maharashtra: Ahmednagar and a key to the Indian species of *Macrocentrus* Curtis is provided.

Types\* have been deposited in the Entomological collection of Department of Zoology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

### KEY TO THE INDIAN SPECIES OF *MACROCENTRUS* CURTIS

1. Body ivory white ..... 4
- Body yellowish-red, brownish to dark brown; face punctate ..... 2
2. Propodeum evenly rugose all over; first tergite finely, transversely striate; tergite 3 without sculpture .....  
..... *trimaculatus* (Cameron) Nixon, 1939
- Propodeum differently sculptured; tergite not

3. Propodeum reticulately rugose; mesopleurum finely punctate; tergite 1 and (2+3) finely, longitudinally striate all over; ovipositor as long as body ..... *persephone* Nixon, 1950
- Propodeum with mid transverse carina, basally longitudinally strigose; tergite 1 reticulately strigose, shallowly punctate; tergites (2+3) striate throughout; ovipositor slightly longer than body ..... *nixoni* sp. nov.
4. Face smooth; propodeum with faint scaly reticulation and traces of transverse striations; mesopleurum shining, punctures indistinct; tergite 1 shining, with faint traces of longitudinal aciculation; ovipositor sheath as long as abdomen plus the propodeum .....  
..... *crassinervis* Nixon, 1950

### *Macrocentrus nixoni* sp. nov. (Figs. 1-3)

**Female:** Length 4.9 mm. (Fig. 1). Head (Fig. 2) transverse, 2.4 times as wide as long; vertex smooth, with pubescence; interorbital space 0.2 times the width of head; frons moderately punctate, pubescent; face 1.45 times as wide as long, convex, with sparse punctures, pubescent; mandible 2.2 times as long as wide at base, bidentate, with tuft of bristles from outer side; antenna 2 + 45 segmented, finely pubescent throughout the length; scape 2.4 times as long as wide, finely pubescent; pedicel as long as wide; post pedicel 7.3 times as long as wide; penultimate segment 0.6 times the length of terminal segment; malar space as long as basal width of mandible;

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\*Serial No. of the type specimens deposited at Dr. B.A. Marathwada University, Aurangabad is BR MCR1/MUZ/SMK2.

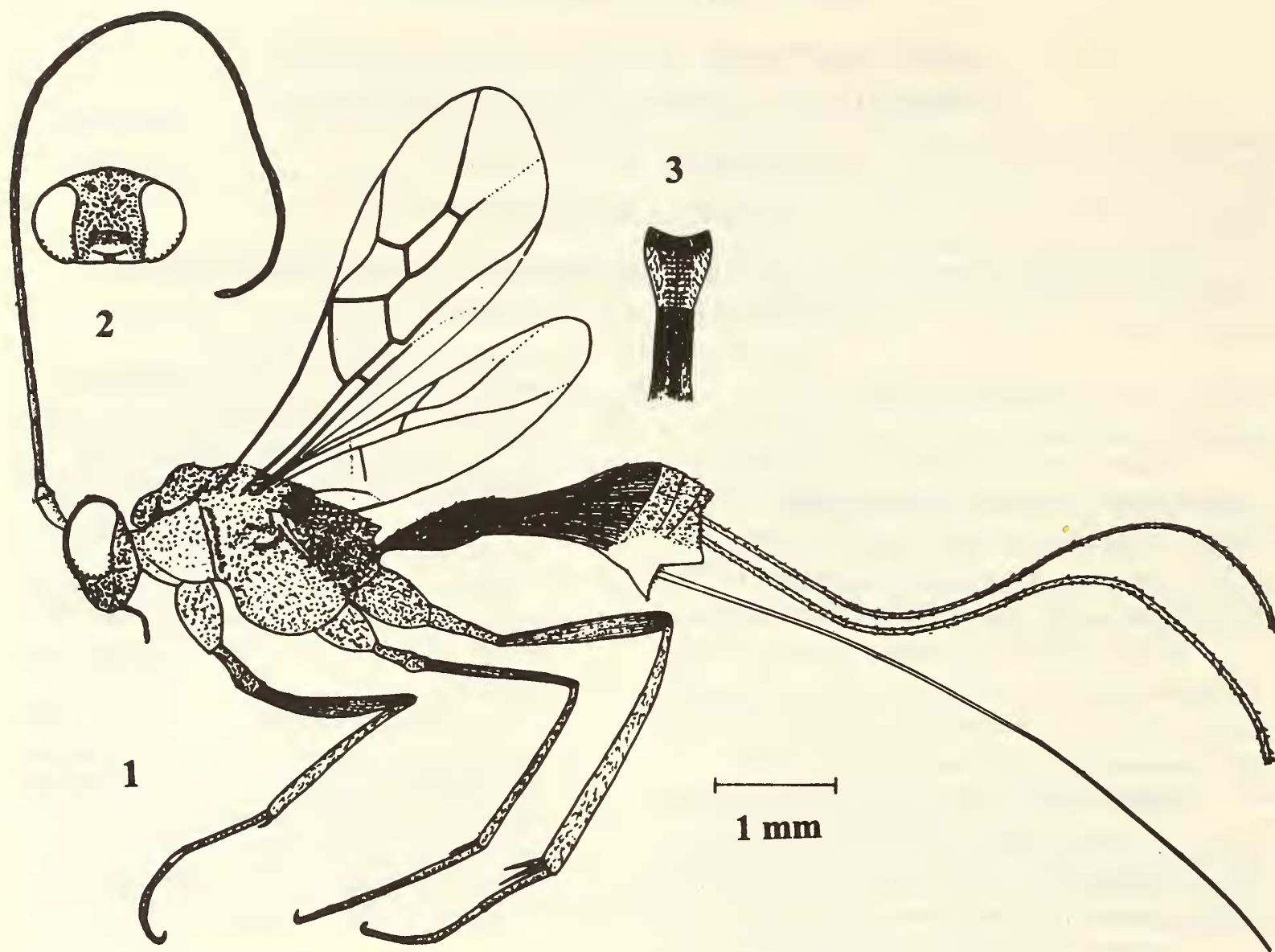


Fig. 1-3: *Macrocentrus nixonii* sp. Nov. (Female). 1. Adult lateral view; 2. Head, frontal view; 3. Propodeum, with first abdominal tergite.

eye bare, 1.8 times as long as wide; maxillary palp very long; occipital carina absent.

**Thorax:** 2.5 times as long as wide; pronotum shiny, pubescent, its posterior margin carinated; mesoscutum smooth, sparsely, shallowly punctate, sparsely pubescent; notauli distinct, complete; scutellum shiny, weakly, shallowly punctate, finely pubescent, without any carina; postscutellum small, shiny; mesopleurum not polished, weakly punctate, pubescent; prepectal carina distinct; mesopleural furrow distinct, extending to the length of mesopleurum; mesopleural fovea distinct; metapleurum rugose, punctate, pubescent; submetapleural carina distinct; propodeum (Fig. 3) with mid transverse carina, basally longitudinally strigose, basal longitudinal carina extending to the tip,

pubescent; propodeal spiracle round. Hind leg coxa long, 4 times as long as wide, moderately punctate on outer side, striate on inner side, pubescent; trochanter long; first trochanter 3.3 times as long as wide, moderately, shallowly punctate, pubescent; femur 8 times as long as wide, 1.5 times as long as coxa, weakly striate, moderately, shallowly punctate, pubescent; tibial spur 0.4 times the length of basitarsus; tibia 0.35 times the length of femur, 16.5 times as long as its own apical width, aciculate, moderately punctate, pubescent; basitarsus 0.35 times the length of tibia; second tarsomere 0.4 times the length of basitarsus; claw simple, bifid. Forewing 3.15 times as long as broad; stigma 4.1 times as long as wide; metacarpus 1.45 times as long as stigma; first abscissa of radius 0.5 times the

length of second abscissa; second abscissa of radius 1.9 times as long as first abscissa; third abscissa of radius 4.2 times as long as first abscissa; three cubital cells present; second cubital cell with four unequal sides; cubitus 2.25 times as long as stigma, not sclerotised throughout the length; medius 0.6 times the length of costa; basal 0.6 times the length of medius; nervulus slightly reclivous, distad, 0.6 times the width of stigma; subdiscoideus 1.9 times as long as stigma; anal cell 23.7 times as long as wide, with four marginal bristles. Hind wing 4.4 times as long as broad; nervellus inclivous, basal 0.45 times the length of submediella; basella 0.15 times the length of mediella, sclerotized; subcostella 1.4 times as long as mediella; post-nervellus absent.

**Abdomen:** 3.5 times as long as wide — long, wide medially; first tergite 2 times as wide apically as basally, 3.5 times as long as basal width, strigoso-reticulate, shallowly punctate, pubescent; suture between first and second tergites distinct; second tergite fused with third; tergite (2 + 3) 1.8 times as long as wide apically, striate throughout the length, weakly punctate, pubescent; fourth tergite 0.3 times the basal width, moderately punctate, pubescent; fifth tergite 0.4 times the basal width, moderately punctate, pubescent; sixth tergite 0.3 times its own width, conical, moderately punctate, pubescent; seventh tergite slightly visible; ovipositor slightly longer than the body length; ovipositor sheath as long as ovipositor, with bristles throughout the length.

Colour: yellowish-red. Antenna, ovipositor

sheath brownish-black; stigma, veins and ovipositor reddish-brown; tip of mandibles and oblong spot on frons blackish.

**Male:** Unknown.

**Holotype:** Female: INDIA: Maharashtra: Ahmednagar, 20. x. 1990, on wing, coll. S.M. Kurhade; Antenna, wings and legs mounted on slides and labelled as above.

**Paratypes:** 4 females, data same as holotype.

**Etymology:** The species has been named *nixoni* in honour of Dr. G.E.J. Nixon, a well known taxonomist on Braconidae.

**Comments:** In the key to the Indian species of *Macrocentrus* Curtis cited above, the new species *Macrocentrus nixoni* resembles *Macrocentrus persephone* Nixon (1950) in the key characters. However, it differs from the same in the following characters: (i) antenna 2 + 45 segmented, (ii) propodeum with mid transverse carina, basally longitudinally strigose, (iii) mesopleurum weakly punctate, (iv) first tergite strigoso-reticulate, shallowly punctate and (v) ovipositor slightly longer than body.

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